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Stationary and high-frequency pulsed electron paramagnetic resonance of a calcified atherosclerotic plaque

Abdul'yanov V., Galiullina L., Galyavich A., Izotov V., Mamin G., Orlinskii S., Rodionov A., Salakhov M., Silkin N., Sitdikova L., Khairullin R., Chelyshev Y.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

New possibilities of applying high-frequency electron paramagnetic resonance in medicine are demonstrated on an example of the investigation of a calcified atherosclerotic plaque. After the irradiation of the atherosclerotic plaque by x rays, a new type of paramagnetic centers-organomineral radicals-is detected. The spectral and relaxation characteristics of these radicals depend on the calcification degree of the atherosclerotic plaque and can be used for diagnostics. © 2008 Pleiades Publishing, Ltd.

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